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10/561,208	12/16/2005	Yasushi Uesaka	92478-8200	4029
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EXAMINER				
HASAN, SYED Y				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/561,208

Applicant(s)

UESAKA ET AL.

Examiner

SYED Y. HASAN

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 3 and 7 - 20 is/are rejected.
- 7) ☐ Claim(s) 4 - 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CIS-100)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 12/16/2005

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility " (Official Gazette notice of 22 November 2005), Annex IV reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claims 11 - 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claims 11 - 20 define a "computer- readable program" with descriptive material.

A "program" embodying functional descriptive material is neither a process nor a product (i. e. a tangible "thing") and therefore does not fall into one of the four

statutory class of 101. Rather a "program" is a form of energy, in the absence of any physical structure or a tangible material.

Because the full scope of the claim as properly read in light of the disclosure encompasses non- statutory subject matter, the claim as a whole is non-statutory. The examiner suggests amending the claim to include the disclosed tangible readable computer readable media, while at the same time excluding the intangible media such as software, signals, carrier waves, etc. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 7, 10, 11, 17 and 20 are rejected under 35 U.S.C. 102 (b) as being anticipated by Oetzel (US 2003/0193520).

Regarding **claim 1**, Oetzel discloses a generating apparatus that generates, based on a first volume image for a first disc, a second volume image for a second disc, the generating apparatus comprising:

a conversion unit operable to convert first scenario data written under a first scenario-description scheme for the first disc, into second scenario data written under a second scenario-description scheme for the second disc (para 0036, illustrates the converting process from first scenario data to second scenario data for a disc) and

a formatting unit operable to obtain the second volume image that contains a digital stream and the second scenario data that has been obtained by the conversion unit (fig 4, 430, para 0040, illustrates the formatting process and fig 3, steps 511 – 523, para 0046, further illustrates this process)

Regarding **claim 7**, Oetzel discloses the generating apparatus, wherein the first scenario data and the second scenario data are respectively one or more commands that have been incorporated in the corresponding digital stream, and the first scenario-description scheme and the second scenario-description scheme are respectively a scheme under which the corresponding commands are described (para 0019 and 0020 illustrate commands in digital stream)

Regarding **claim 10**, Oetzel discloses a generating apparatus that generates, based on a first volume image for a first disc, a second volume image for a second disc which is a recordable disc, the generating apparatus comprising: a conversion unit operable to convert first scenario data written under a first scenario-description scheme for the first disc, into second scenario data written under a second scenario-description scheme for the second disc (see claim 1 above) and a writing unit operable to write, to the second disc, the second scenario data that the conversion unit has obtained, in association with a digital stream for the second disc (fig 1, 121, para 0011, write to

disc, fig 2, 250, para 0017, disc, fig 3, 327, para 0039, write to medium and fig 4, 450, para 0040, write to medium)

Claim 11 is rejected based on claim 1 above.

Claim 17 is rejected based on claim 7 above.

Claim 20 is rejected based on claim 10 above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oetzel (US 2003/0193520) in view of Watkins (US 7039298)

Regarding **claim 2**, Oetzel discloses the generating apparatus (see claim 1 above) wherein

the first scenario data is path information defining a playback path of a digital stream contained in the first volume image, and the second scenario data is path information defining a playback path of the digital stream contained in the second volume image, each playback path being comprised of one or more logical playback sections (para 0035, illustrates playback path of digital stream for both volume images)

However Oetzel does not disclose under the first scenario-description scheme,

playback sections are defined by information specifying starting address and playback time length and the conversion performed by the conversion unit is to replace the information specifying starting address and playback time length with starting-time information and ending-time information

On the other hand Watkins teaches under the first scenario-description scheme, playback sections are defined by information specifying starting address and playback time length (col 2, line 49 to col 3, line 17, col 3, line 31 – 43 and col 4, line 14 to line 21, illustrate start and stop times of playback) and the conversion performed by the conversion unit is to replace the information specifying starting address and playback time length with starting-time information and ending-time information (col 10, lines 11 – 33 illustrate replacing the information)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate under the first scenario-description scheme, playback sections are defined by information specifying starting address and playback time length and the conversion performed by the conversion unit is to replace the information specifying starting address and playback time length with starting-time information and ending-time information as taught by Watkins in the system of Oetzel in order to appropriately assemble from the extracted segment.

Claim 12 is rejected based on claim 2 above.

6. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oetzel (US 2003/0193520) in view of Watkins (US 7039298) and further in view of Ono et al (US 2002/0085592)

Regarding **claim 3**, Oetzel disclose the generating apparatus (see claim 1 and 2 above)

However Oetzel does not disclose wherein the digital stream contained in the second volume image includes a plurality of access units, a starting time and a starting address, and the path information for the second disc indicates starting/ending addresses of each playback section, by indirect reference via the entry maps.

On the other hand Ono et al teaches the digital stream contained in the second volume image includes a plurality of access units (para 0058 illustrates generating TS packet sequence as defined for access points in the disclosed invention in figure 11) and the generating apparatus includes a generating unit operable to generate entry maps that each indicate, for each access unit (para 0058 illustrates generating TS packet sequence as defined for access points in the disclosed invention in figure 11)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the digital stream contained in the second volume image includes a plurality of access units and the generating apparatus includes a generating unit operable to generate entry maps that each indicate, for each access unit as taught by Ono et al in the system of Oetzel in order to provide a transport stream multiplexing method capable of maintaining coordination on the time axis

The combination of Oetzel and Ono et al do not disclose a starting time and a starting address, and the path information for the second disc indicates starting/ending addresses of each playback section, by indirect reference via the entry maps.

However Watkins teaches a starting time and a starting address (col 2, line 49 to

col 3, line 17, col 3, line 31 – 43 and col 4, line 14 to line 21, illustrate start and stop times of playback) and the path information for the second disc indicates starting/ending addresses of each playback section, by indirect reference via the entry maps (col 2, line 49 to col 3, line 17, col 3, line 31 – 43 and col 4, line 14 to line 21, illustrate start and stop times of playback)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a starting time and a starting address and the path information for the second disc indicates starting/ending addresses of each playback section, by indirect reference via the entry maps as taught by Watkins in the combined system of Oetzel and Ono et al in order to appropriately assemble from the extracted segment.

Claim 13 is rejected based on claim 3 above.

7. Claims 8, 9, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oetzel (US 2003/0193520) in view of deCarmo (US 6138175)

Regarding **claim 8**, Oetzel discloses the generating apparatus (see claims 1 and 7 above) wherein

However Oetzel does not disclose the commands incorporated in the digital stream of the first volume image include a combining command for making a playback apparatus execute two or more processes and the conversion performed by the conversion unit is to replace the combining command with a number of commands, the number corresponding to a number of processes to be executed according to the combining command

On the other hand deCarmo teaches under the first scenario-description scheme,

playback sections are defined by information specifying starting address and playback time length (col 2, line 49 to col 3, line 17, col 3, line 31 – 43 and col 4, line 14 to line 21, illustrate start and stop times of playback) and the conversion performed by the conversion unit is to replace the information specifying starting address and playback time length with starting-time information and ending-time information (col 10, lines 11 – 33 illustrate replacing the information)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the commands incorporated in the digital stream of the first volume image include a combining command for making a playback apparatus execute two or more processes and the conversion performed by the conversion unit is to replace the combining command with a number of commands, the number corresponding to a number of processes to be executed according to the combining command as taught by deCarmo in the system of Oetzel in order to combine the commands and thereby reduce by half the memory required to store the two commands.

Regarding **claim 9**, Oetzel discloses the generating apparatus (see claims 1 and 7 above) wherein

the commands incorporated in the digital stream of the first volume image include a jump command that orders a playback apparatus to jump to another area of the first disc (col 2, lines 26 – 34, illustrates jump to another area of the disc) and the conversion performed by the conversion unit is to replace the jump command with one or more commands (col 2, lines 43 – 62, illustrate replacing jump command with other

commands)

However Oetzel does not disclose the commands incorporated in the digital stream of the first volume image include a jump command that orders a playback apparatus to jump to another area of the first disc and the conversion performed by the conversion unit is to replace the jump command with one or more commands.

On the other hand deCarmo teaches the commands incorporated in the digital stream of the first volume image include a jump command that orders a playback apparatus to jump to another area of the first disc (col 2, lines 26 – 34, illustrates jump to another area of the disc) and the conversion performed by the conversion unit is to replace the jump command with one or more commands (col 2, lines 43 – 62, illustrate replacing jump command with other commands)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the commands incorporated in the digital stream of the first volume image include a jump command that orders a playback apparatus to jump to another area of the first disc and the conversion performed by the conversion unit is to replace the jump command with one or more commands as taught by deCarmo in the system of Oetzel in order to combine the commands and thereby reduce by half the memory required to store the two commands.

Claim 18 is rejected based on claim 8 above.

Claim 19 is rejected based on claim 9 above.

Allowable Subject Matter

8. Claims 4 - 6 are objected as being dependent on a rejected base claim, but would allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims

Regarding claim 4 the prior art of record fails to teach, disclose or fairly suggest as recited in claim 4, the prior art fails to disclose a generating apparatus, wherein:

the digital stream contained in the first volume image and the digitalstream contained in the second volume image respectively and paired with corresponding path information to constitute a tile,

the first scenario data and the second scenario data are respectively a jump table that a playback apparatus refers to when jump is performed from an entire menu of the corresponding disc to the corresponding title,

the first scenario-description scheme allows two jump tables: a first table for the entire first disc; and a second table that is created for a domain that the title belongs to, and

the conversion performed by the conversion unit is to replace the first and second tables with one jump table for the entire second disc.

Since claims 5 and 6 depend on claim 4, therefore they will also be allowed.

Claims 14, 15 and 16 will also be allowed based on claims 4, 5 and 6 respectively and amended to overcome the rejection(s) under 35 U.S.C. 101 set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Y. Hasan whose telephone number is 571-270-1082. The examiner can normally be reached on 9/8/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. Y. H./
08/01/2009

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